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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,529	11/14/2003	Alvin Mark Terry	41942-05553	2211

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EXAMINER

WINAKUR, ERIC FRANK

ART UNIT	PAPER NUMBER
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3768

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 53 - 60, 63, and 68 - 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diab et al. (6,002,952 - previously cited) in view of Noll. Diab et al. teach an oximeter arrangement (Figure 12; column 15, line 37 - column 16, line 34) for processing red and infrared light samples including performing Fourier transforms on the measured data. The frequency domain information can be further processed to extract the pulse rate information (see Figure 12 elements 1260, 1252 and Figure 17, and the description of "Transform Based Pulserate Detection" which begins in column 20). The Fourier transforms can be implemented with fast Fourier transforms (column 22, lines 54 - 59). Diab et al. teach all of the features of the claimed invention except that log transformations are applied to the frequency domain signals to provide log transformed frequency domain signals. Noll teaches a cepstrum analyzer, using the same principles of Diab, that allows identification of a peak by use of logarithmic transforms of frequency transformed values (column 2, line 38 - column 4, line 48). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Diab et al. to include applying a log transformation to the frequency domain data,

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as taught by Noll, since this allows identification of the desired spectral peak that relates to pulse rate.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 53 - 55, 57, and 64 - 69 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 19, 21, and 44 of U.S. Patent No. 6,650,918. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are broader than those of the patent. Thus, any method or apparatus meeting the limitations of the patent would necessarily meet those of the instant application.

Response to Arguments

5. Applicant's arguments with respect to claims 54 - 60, 63, and 68 - 73 have been considered but are moot in view of the new ground(s) of rejection.

6. It is noted that Applicant contends that the teaching of column 22, line 66 - column 23, line 3 of the Diab reference (see remarks filed 1/25/06 in the paragraph bridging pages 9 and 10) teaches away from a rejection such as that set forth in paragraph 2 above. However, this teaching of the Diab reference must be interpreted with proper consideration of its context, and cannot be understood without such a consideration. When reviewed in such a manner, it is clear that Diab is describing analysis related to removal of noise from an input signal. It is incorrect to extrapolate that the noted comment was meant to teach away from use of a log transformation in the pulse rate (Figure 17) analysis. As such, the rejection set forth above is not taught away from, and is properly set forth.

Allowable Subject Matter

7. Claims 61, 62, and 74 - 76 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

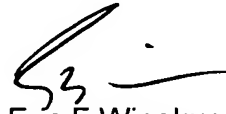
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric F. Winakur whose telephone number is 571/272-4736. The examiner can normally be reached on M-Th, 7:30-5; alternate Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on 571/272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Eric F Winakur
Primary Examiner
Art Unit 3735

16 April 2006